Community-Based Interventions

The article *Reconsidering Community-Based Health Promotion: Promise, Performance, and Potential* by Merzel and D'Afflitti[1] in this issue of the Journal makes a valuable contribution to the literature on community approaches to health promotion. The breadth of studies covered in this review article, combined with the prominence the Journal is giving to the subject in this issue, suggests how far the field has come in its understanding of the links between public health and communities. The authors summarize many of the community-based studies since 1980 and draw useful conclusions for strengthening community-based efforts at improving the health of the US population. Moreover, by drawing from the lessons learned from human immunodeficiency virus (HIV)-prevention programs, they provide significant recommendations for improving the potential of community-based strategies. However, we would like to draw the readers' attention to some of the substantive issues involved in reviewing such a diverse literature, including a number raised by Merzel and D'Afflitti.

The term *community-based* has a wide range of meanings. In this editorial we focus on 4 categories of community-based projects based on implicit constructions of community employed by investigators: community as setting, community as target, community as agent, and community as resource. This typology (many typologies of community approaches have been proposed in the literature, the most frequently used of which is Rothman's *Strategies of Community Intervention*[2]; we chose not to use Rothman's categories explicitly, although some of his ideas are included in the discussion) is used to illustrate the difficulties in summarizing results across the array of community-based projects (of course we recognize that projects rarely fit our categories neatly and that any one project may have characteristics borrowed from each of the categories). This brief discussion of "types" of projects is followed by a discussion of the importance of community capacity; the use of

social ecology as a framework for community interventions; the use of a theory of community change; and the role of public health values.

A TYPOLOGY OF COMMUNITY-BASED INTERVENTIONS

As indicated by some of the studies reviewed by Merzel and D'Afflitti, the term *community-based* often refers to community as the *setting* for interventions. As setting, the community is primarily defined geographically and is the location in which interventions are implemented. Such interventions may be citywide, using mass media or other approaches, or may take place within community institutions, such as neighborhoods, schools, churches, work sites, voluntary agencies, or other organizations. Various levels of intervention may be employed, including educational or other strategies that involve individuals, families, social networks, organizations, and public policy. These community-based interventions may also engage community input through advisory committees or community coalitions that assist in tailoring interventions to specific target groups or to adapt programs to community characteristics. However, the focus of these community-based projects is primarily on changing individuals' behaviors as a method for reducing the population's risk of disease. As a result, the target of change may be populations, but *population change* is defined as the aggregate of individual changes.

The term *community-based* may also have a very different meaning, that of the community serving as the *target* of change. *The community as target* refers to the goal of creating healthy community environments through broad systemic changes in public policy and community-wide institutions and services. In this model, health status characteristics of the community are the targets of interventions, and community changes, particularly changes thought to be related to health, are the desired outcomes. Several significant public health initiatives have adopted this model. For example, community indicators projects use data as a catalytic tool to go beyond using individual behaviors as primary outcomes.[3] Indicators can range from the number of days exceeding Environmental Protection Agency standards for air quality to the amount of park and recreation facility space per capita to the proportion of residents living below federal poverty levels.[4] Strategies are tied to selected indicators, and success is defined as improvement in the indicators over time.

A third model of "community-based" is community as *resource.* This model is commonly applied in community-based health promotion because of the widely endorsed belief that a high degree of community ownership and participation is essential for sustained success in population-level health outcomes. These programs are aimed at marshaling a community's internal resources or assets, often across community sectors, to strategically focus their attention on a selected set of priority health-related strategies. Whether a categorical health issue is predetermined or whether the community selects, perhaps within certain parameters, its own priorities, these kinds of interventions involve external resources and some degree of actors external to the community that aim to achieve health outcomes by working through a wide array of community institutions and resources. Examples of major public health initiatives that have applied this model include "healthy cities" initiatives within several states,[5] the National Healthy Start program,[6] and the federal Center for Substance Abuse Prevention Community Partnership program.[7]

Finally, a fourth model of "community-based," and the one least utilized in public health, is community as *agent.* Although closely linked to the model just described, the emphasis in this model is on respecting and reinforcing the natural adaptive, supportive, and developmental capacities of communities. In the language of Guy Steuart,[8] communities provide resources for meeting our day-to-day needs. These resources are provided through community institutions including families, informal social networks, neighborhoods, schools, the workplace, businesses, voluntary agencies, and political structures. These naturally occurring *units of solution* meet the needs of many, if not most, community members without the benefit of direct professional intervention. However, communities are defined as much by whom they exclude as whom they include, and the network of relationships that defines communities may be under stress.

The goal of community-based programs in this model is to carefully work with these naturally occurring units of solution as our units of practice, or where and how we choose to intervene. This necessitates a careful assessment of community structures and processes, in advance, of any intervention. It also requires an insider's understanding of the community to identify and work with these naturally occurring units of solution to address community problems. Thus the aim is to strengthen these units of solution to better meet the needs of community members. This approach may include strengthening community through neighborhood organizations and network linkages, including informal social networks, ties between individuals and the organizations that serve them, and connections among community organizations to strengthen their ability to collaborate. The model also necessitates addressing issues of common concern for the community, many or most of which are not directly health issues. In other words, this model necessitates *starting where people are.*[9]

The importance of these models of community-based interventions is that they reflect different conceptions of the nature of community, the role of public health in addressing community problems, and the relevance of different outcomes. When they are presented as pure types, it is understood that no one model is used exclusively with the practice of community-based health promotion. Although community as setting is obviously limited in its vision, community as agent can be regarded as romanticized, especially in light of the severe structural economic, social, and political deficits plaguing some communities. Moreover, Merzel and D'Afflitti illustrate the difficulties in summarizing across program models with different strategies and expected outcomes. Although many of the earlier projects reviewed by Merzel and D'Afflitti were based on the idea of community as setting, many of the later projects

are based on one of the other 3 models. The latter 3 models—community as *target*, community as *resource,* and community as *agent*—suggest that appropriate outcomes may not just be changes in individual behaviors but may also include changes in *community capacity.*[10,11] In fact, it may be argued that contemporary public health has 2 broad goals: strengthening the health of our communities and building community capacity to address health-related issues.

CIVIL SOCIETY, COMMUNITY CAPACITY, AND COMMUNITY-BASED HEALTH PROMOTION

Recent years have seen an explosion in the literature on civic renewal, mediating structures (professional organizations, churches, block watch organizations), and social capital starting in the political science field but spilling over into other disciplines and into the popular literature as well. This suggests a broader context within which community programs take place. Civil society can be regarded, for community-based health promotion, as the "setting of settings."[12] Civil society represents the self-organizing activities of people within associations, unions, churches, and communities. It is neither the state nor the market. It is not a collection of individuals pursuing their own interests, but rather collectivities pursuing common interests. It encompasses both community service, formal and informal, and advocacy, not the least of which includes voting. The morality of a civil society mandates the broadest possible inclusion in the participation and institutions that constitute it. Thus in calling forth the voices of even the weakest among a people, civil society goals are fully compatible with contemporary public health goals of reducing health disparities.

The vitality of civil society provides an essential context for successful community-based health promotion, especially as we come to recognize and increasingly utilize the capacity of communities to mobilize to address community issues. Community capacity may be regarded as a crucial variable mediating between the activities of health promotion interventions and population-level outcomes. A number of dimensions of community capacity have been identified, among them skills and knowledge, leadership, a sense of efficacy, trusting relationships, and a culture of openness and learning.[13] An understanding of the community's ecology can lead to a better match with community-based health promotion interventions and can provide tools and resources unavailable from outside agents for making gains against complex public health problems like infant mortality, violence, substance abuse, and many others. More profoundly, an appreciation for community capacity shifts the paradigm underlying common intervention strategies to a focus on community building as a pathway to health. This may include conscious efforts to develop new and existing leadership, strengthen community organizations, and further community development and interorganizational collaboration.[14] These efforts may require ensuring opportunities for community participation, strengthening relationships of trust and reciprocity among community groups and organizations, and facilitating forums for community dialogue. Community capacity represents both a necessary condition, an indispensable resource, and a desired outcome for community interventions.

ECOLOGICAL PERSPECTIVES

As indicated in the Merzel and D'Afflitti article, increasing attention is being paid to ecological perspectives in community-based interventions. Based on the work of Urie Bronfenbrenner[15] and other systems models, social ecology[16–18] places the behavior of individuals within a broad social context, including the developmental history of the individual, psychological characteristics (norms, values, attitudes), interpersonal relationships (family, social networks), neighborhood, organizations, community, public policy, the physical environment, and culture. Behavior is viewed not just as the result of knowledge, values, and attitudes of individuals but as the result of a host of social influences, including the people with whom we associate, the organizations to which we belong, and the communities in which we live.

If individuals' behaviors are the result of social influences at different levels of analysis, then changing behavior may require using social influences—family, social networks, organizations, public policy—as strategies for change. Our interventions may include family support (as in diet and physical-activity interventions), social network influences (used in tobacco, physical-activity, access-to-health-care, and sexual-activity interventions), neighborhood characteristics (as in HIV and violence-prevention programs), organizational policies and practices (used in tobacco, physical-activity, and screening programs), community factors (observed in physical-activity, diet, access-to-health-services, and violence programs), public policy (as in tobacco, alcohol, and access-to-health-care programs), the physical environment (used in the prevention-of-unintentional-injuries and environmental-safety programs), and culture (observed in some counteradvertising interventions). Thus we can intervene at multiple levels within the social ecology as a way of addressing behavioral risks.

However, social ecology is more than the idea that we can use interventions at multiple levels of the social system. It is also the idea that each level of analysis is part of an embedded system characterized by reciprocal causality. For example, individuals are affected by the families and informal networks of which they are members, and individual characteristics affect the social networks to which we have access. Moreover, our social networks are largely developed within the context of organizations and environments that bring us into contact with others. This suggests that ecological interventions may occur at one level and produce change or changes at others. We need to distinguish clearly between levels of intervention and targets of interventions,[19] whether our focus is on behavioral change, strengthening units of solution, or building the civil society.

Models such as social ecology provide us with not only a systems framework for thinking about behavioral change as an outcome of community-based in-

terventions but also a framework for thinking about healthy communities. What would it be like if we were to have the public's health as one of our core values? Perhaps tobacco use can serve as an example. Since the 1950s, when almost one half of the US adult population smoked, we have cut smoking rates in half. We have seen widespread shifts in perceptions of smokers as masculine (Marlboro), sophisticated (Winston), and sexy (Virginia Slims) adults to widespread views of smokers as weak willed and addicted. These changes have occurred despite the deliberate shaping of public opinion by tobacco producers and the marketing of tobacco to vulnerable populations.[20] These cultural changes in perceptions of smoking have not occurred as the result of any single community-based intervention but are the result of increasing evidence of the harmful effects of tobacco use and the cumulative impact of multiple systemic interventions, including bans on smoking in airplanes and public buildings, rises in the cigarette taxes, antitobacco advertising, and lawsuits against tobacco companies.

The tobacco example suggests that the goal of community-based interventions is not only to change individual perceptions and behaviors but also to embed public health values in our social ecology, including families, social networks, organizations, public policy, and ultimately our culture—how we think about things. Although we lack an effective method for estimating effects, perhaps we should think in terms of community-based interventions as part of the social ecology and in terms of the cumulative effects of multiple community trials rather than the effects of a single project.

THEORIES OF CHANGE

Too rarely do community-based interventions actually target organizational, community, environmental, or policy-level changes. One compelling reason is the complexity of fostering such changes and the field's lack of knowledge about the conditions under which social change occurs. (Even for those most interested in individual behavioral change, the targeting of higher ecological levels is essential to create the social context supporting healthy behavior. The ways that behavior is institutionalized (organizational-level change), normalized (community-level change), and legally bounded (policy-level change) are essential "social facts," without which individual behavioral change is not easily sustained.)

In recent decades, considerable progress has been made in articulating program or implementation theories,[21,22] yet there are relatively few advances in developing a theory of *community* change. This inadequacy of theory seriously hampers the evaluation of community-based programs, including estimation of the magnitude and timing of outcomes.

Several types of theories are important for thinking about community change. Implementation theory, for example, identifies the activities—the *what* and the *when*—to be undertaken in any change process and their links to expected intermediate- and longer-term outcomes, most often codified in a program's logic model. Typical implementation theories for community-based programs include a sequenced set of major steps, commonly community diagnosis/assessment, planning, intervention, and evaluation. Such theory is invaluable for spelling out the mechanics and activities but provides little understanding of the *how* and *why*—the underlying process, dynamics and conditions under which community change takes place. Moreover, many implementation theories are relatively generic and may not be linked to community dynamics, and although they may use information on context, it is frequently not clear how community context should affect the implementation process.

Explaining the *how* and *why* of community change is the express purpose of an underlying theory of change.[23] Theories of community change are the least explored and offer the greatest promise for documenting the effectiveness of and improvements in community-based health promotion. To achieve this, we need to make explicit our program assumptions about the causal relationships among an intervention's activities and the mediating factors that lead to desired outcomes, as well as the effect of potential confounding factors. Logic models are frequently used for this purpose.

In addition to more rigorous designs for outcome studies, community change theory would benefit from qualitative research that explores the various factors affecting community change, linkages among the factors, and the conditions under which those linkages occur. Program assumptions must be made explicit so that data collection and analysis can be undertaken to track performance. In fact, building on the excellent review of Merzel and D'Afflitti, one could fruitfully conduct a cross-case analysis of theories of change with a similar inventory of community-based health promotion. We suspect that one would find a limited number of variables being selected for manipulation—most commonly, information—and a general lack of awareness or strategic use of community factors as levers of change.

It would be tempting to conclude from our brief discussion of community change and intervention theories that the problem of strengthening community-based interventions is largely a technical or theoretical one.[24] However, many of the problems around which community-based interventions have been developed—HIV, adolescent pregnancy, diet, tobacco use, other drug use, alcohol consumption, physical activity, access to health services, firearms—have profound personal and cultural meaning. These problems do not just result from personal choices; rather, they say something about social structure and who we are as individuals and as a society, and about our place in society. Whether we talk about social class differentials in heart disease morbidity and mortality or access to care, public health is inherently linked to ideas about how the burden of ill health is—and should be—distributed in society.

Public health is more than a body of theory and intervention methods. We cannot separate how we do public health from why we do public health. Whether we talk about changing behavior, changing community structures, or building community capacity, these changes cannot be separated from our ideals about

what constitutes a good community or a good society.[25] ■

Kenneth R. McLeroy, PhD,
Barbara L. Norton, MBA, MPH,
Michelle C. Kegler, DrPH,
James N. Burdine, DrPH,
Ciro V. Sumaya, MD, MPHTM

About the Authors

Kenneth McLeroy, James Burdine, and Ciro Sumaya are with the Texas A&M University System School of Rural Public Health, Bryan. Barbara Norton is a doctoral candidate at the University of Oklahoma School of Public Health, Oklahoma City. Michelle Kegler is with Emory University School of Public Health, Atlanta, Ga.

Requests for reprints should be sent to Kenneth R. McLeroy, PhD, associate dean for academic affairs, School of Rural Public Health, 3000 Briarcrest, Suite 310, Bryan, TX 77802 (e-mail: kmcleroy@srph.tamu.edu).

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References

1. Merzel C, D'Afflitti J. Reconsidering community-based health promotion: promise, performance, and potential. *Am J Public Health.* 2003;93:557–574.

2. Rothman J. *Strategies of Community Intervention.* Itasca, Ill: FE Peacock Publishers; 1995.

3. Coulton C. Using community-level indicators of children's well-being in comprehensive community initiatives. In: Connell J, Kubisch A, Schorr L, Weiss C, eds. *New Approaches to Evaluating Community Initiatives.* Washington DC: The Aspen Institute; 1995: 173–200.

4. *The Community Indicators Handbook.* San Francisco: Redefining Progress; 1997.

5. Duhl LJ, Lee PR. Focus on healthy communities [theme issue]. *Public Health Rep.* 2000;115:107–295.

6. Minkler M, Thompson M, Bell J, Rose K. Contributions to community involvement to organizational-level empowerment: the federal Healthy Start experience. *Health Educ Behav.* 2001; 28:783–807.

7. Yin RK, Kaftarian SJ, Jacobs NJ. Empowerment evaluation at federal and local levels. In: Fetterman D, Kaftarian S, Wandersman A, eds. *Empowerment Evaluation: Knowledge and Tools for Self-Assessment and Accountability.* Thousand Oaks, Calif: Sage Publications; 1996:188–207.

8. Steckler A, Israel B, Dawson L, Eng E. Theme issue: community health development: an anthology of the works of Guy Steuart. *Health Educ Q.* 1993; suppl 1:S1–S153.

9. Nyswander D. Education for health: some principles and their applications. *Health Educ Monogr.* 1956;14: 65–70.

10. Goodman RM, Speers MA, McLeroy K, et al. Identifying and defining the dimensions of community capacity to provide a basis for measurement. *Health Educ Behav.* 1998;25:258–278.

11. Norton B, McLeroy K, Burdine J, Felix R, Dorsey A. Community capacity: concept, theory, and methods. In: DiClemente R, Crosby R, Kegler M, eds. *Emerging Theories in Health Promotion Practice and Research.* San Francisco, Calif: Jossey-Bass; 2002:194–227.

12. Walzer M. The idea of a civil society: a path to social reconstruction. In: Dionne EJ, ed. *Community Works: The Revival of Civil Society in America.* Washington, DC: Brookings Institution Press; 1998: 123–143.

13. Easterling D, Gallagher K, Drisko J, Johnson T. *Promoting Health by Building Capacity: Evidence and Implications for Grantmakers.* Denver, Colo: The Colorado Trust; 1998:1–24.

14. Chaskin RJ, Brown P, Venkatesh S, Vidal A. *Building Community Capacity.* New York, NY: Aldine de Gruyter; 2001:1-268.

15. Bronfenbrenner U. *The Ecology of Human Development.* Cambridge, Mass: Harvard University Press; 1979.

16. McLeroy K, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. *Health Educ Q.* 1988;15:351–377.

17. Stokols D. Establishing and maintaining healthy environments: toward a social ecology of health promotion. *Am Psychol.* 1992;47:6–22.

18. Poland B, Green L, Rootman I. *Settings for Health Promotion: Linking Theory and Practice.* Thousand Oaks, Calif: Sage Publications; 2000.

19. Richard L, Potvin L, Kishchuk N, Prlic H, Green LW. Assessment of the integration of the ecological approach in health promotion programs. *Am J Health Promotion.* 1996;10:318–328.

20. Warner KE. *Selling Smoke: Cigarette Advertising and Public Health.* Washington, DC: American Public Health Association; 1986.

21. Porras J, Robertson P. Organization development theory: a typology and evaluation. *Res Organizational Change Dev.* 1987;1:1–57.

22. Connell J, Kubisch A. Applying a theory of change approach to the evaluation of comprehensive community initiatives: progress, prospects, and problems. In: Connell J, Kubisch A, Schorr L, Weiss C, eds. *New Approaches to Evaluating Community Initiatives: Concepts, Methods and Contexts.* Washington, DC: Aspen Institute; 1998:15–44.

23. Weiss CH. Nothing as practical as good theory: exploring theory-based evaluation for comprehensive community initiatives for children and families. In: Connell J, Kubisch A, Schorr L, Weiss C, eds. *New Approaches to Evaluating Community Initiatives: Concepts, Methods and Contexts.* Washington, DC: Aspen Institute; 1995:65-92.

24. Buchanan DR. *An Ethic for Health Promotion: Rethinking the Sources of Human Well-Being.* New York: Oxford University Press; 2000.

25. Bellah RN, Madsen R, Sullivan WM, Swidler A, Tipton, SM. *The Good Society.* New York: Vintage Books; 1991.